

Title (en)  
KEY MANAGEMENT METHOD AND APPARATUS

Title (de)  
SCHLÜSSELVERWALTUNGSVERFAHREN UND -VORRICHTUNG

Title (fr)  
PROCÉDÉ ET APPAREIL DE GESTION DE CLÉ

Publication  
**EP 3557815 A1 20191023 (EN)**

Application  
**EP 17926402 A 20170929**

Priority  
SG 2017050492 W 20170929

Abstract (en)  
This application provides a key management method and apparatus, and the key management method includes: encrypting, by user equipment, user identity information based on a first public key; sending, by the user equipment, a first user identity message to a first network device, where the first user identity message includes the user identity information, an indication identifier used to indicate whether the user identity information is encrypted, and a reference identifier used to index the first public key; and sending, by the first network device to a second network device, a third user identity message including the user identity information and the reference identifier that is used to index the first public key, so that when receiving the third user identity message, the second network device can determine, according to a pre-stored mapping table between a public-private key pair and a reference identifier, a first private key corresponding to the first public key, to decrypt the encrypted user identity information by using the first private key, thereby improving data decryption efficiency.

IPC 8 full level  
**H04L 9/32** (2006.01); **H04L 9/08** (2006.01); **H04L 29/06** (2006.01); **H04W 12/00** (2009.01)

CPC (source: CN EP US)  
**G06F 21/46** (2013.01 - CN); **H04L 9/08** (2013.01 - EP); **H04L 9/0819** (2013.01 - CN); **H04L 9/0825** (2013.01 - US); **H04L 9/088** (2013.01 - CN); **H04L 9/32** (2013.01 - EP); **H04L 63/0442** (2013.01 - EP US); **H04L 63/068** (2013.01 - EP US); **H04W 12/037** (2021.01 - EP)

Cited by  
WO2024047586A1

Designated contracting state (EPC)  
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)  
BA ME

DOCDB simple family (publication)  
**EP 3557815 A1 20191023**; **EP 3557815 A4 20191023**; CN 109845187 A 20190604; CN 109845187 B 20230602; CN 110166230 A 20190823; CN 110166230 B 20201016; US 11159311 B2 20211026; US 2020084028 A1 20200312; WO 2019066720 A1 20190404

DOCDB simple family (application)  
**EP 17926402 A 20170929**; CN 201780060472 A 20170929; CN 201910304043 A 20170929; SG 2017050492 W 20170929; US 201916688729 A 20191119